

# NTU, Schaeffler set up joint research lab

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**Singapore**

NANYANG Technological University, Singapore (NTU Singapore) and Schaeffler Group have set up a new joint research lab with a combined funding of S\$5 million over three years.

The lab is set up to study various aspects of personal urban mobility and intelligent transportation systems for mega cities of the future. It will also develop next-generation personal mobility devices to tackle transportation challenges in Singapore.

Schaeffler Group is a leading global automotive and industrial components supplier, headquartered in Germany.

The company had more than 2,300 new patent registrations in 2016 alone, putting it among the leading companies in Germany in terms of inventions.

The lab will be Schaeffler's first Share lab outside Europe.

Peter Gutzmer, deputy chief executive officer and chief technology officer of Schaeffler AG, said: "Schaeffler has a strong legacy of close collaboration and joint research with universities mainly in Europe.

With this agreement to set up the first Share lab outside Germany, we are laying a solid and long-term foundation for cooperation in the Asia-Pacific region."

The lab will be part of the Schaeffler Hub for Advanced Research at NTU (Share at NTU), and is housed at NTU's School of Electrical and Electronic Engineering.

NTU vice-president (research) and chief of staff Lam Khin Yong said: "NTU has deep expertise in smart mobility technologies and a strong track record of industry collaborations. Together with Schaeffler, we aim to develop innovative personal transport solutions that will be safer and more efficient, which will support Singapore's drive towards a car-lite society."

Both organisations signed a master research agreement on Monday at NTU's campus, and Schaeffler demonstrated some of its advanced technology concepts for personal mobility.

This includes the E-Board, an electronic skateboard-like device that comes with a control stick.

Schaeffler also showcased two models of future-oriented four-wheeled bio-hybrid that offer electric-assisted pedalling in a four-wheel format.



**Prof Lam and Dr Gutzmer with the E-Board and the e-bike prototypes. NTU and Schaeffler will develop apps that will allow personal mobility devices to interact safely with traffic infrastructure and vehicles.**

NTU and Schaeffler's partnership will also ride on the NTU-NXP Smart Mobility Test Bed. The Test Bed consists of vehicles equipped with smart units and roadside units with video cameras mounted on street lamps throughout the NTU campus.

Schaeffler is also part of the NTU-NXP Smart Mobility Consortium, which develops innovations in smart mobility.

NTU and Schaeffler will develop applications that will allow personal mobility devices to interact seamlessly and safely with traffic infrastructure

and vehicles around them, using an industry standard vehicle-to-everything (V2X) wireless communication technology.

Andreas Schick, CEO of Schaeffler Asia Pacific, said: "Our long-term vision is to develop Singapore as a hub for research and innovation for urban mobility. The proactive efforts from the government of Singapore make it a highly conducive place for developing technologies for future megacities and Schaeffler is keen to tap into these opportunities, working together with the big and highly educated talent pool."